

Notice of Allowability

Application No.

09/711,905

Examiner

Kim-Kwok CHU

Applicant(s)

ABE, SHINYA

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 8/18/2004.
2. ☒ The allowed claim(s) is/are 1-5, 7-18 and 20-26 which are renumbered as 1-24 respectively.
3. ☒ The drawings filed on 11/15/2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Allowable Subject Matter

1. Claims 1-5, 7-18 and 20-26 are allowable over prior art.
2. The following is an Examiner's statement of reasons for the indication of allowable subject matter based on Applicant's Amendment filed on August 18, 2004.

As in claims 1, 9, 14 and 22, the prior art of record fails to teach or fairly suggest a feedback control having the following features:

(a) the focusing control of the objective lens is executed to position a focal point of the objective lens a predetermined fine distance which is smaller than a film thickness of the photosensitive material film within the photosensitive material film relative to a surface of the photosensitive material film.

As in claims 5, 13, 18, 25 and 26 the prior art of record fails to teach or fairly suggest a feedback control having the following features:

(a) the feedback control is performed using different light whose wavelength is longer than that of the recording light such that a distance between the objective lens and the recording medium remains constant;

(b) a discrepancy of the distance between the objective lens and the recording medium from a desirable distance is

detected using reflected light which is generated as the recording medium reflects the recording light; and

(c) a control target position for the feedback control is corrected based on a detected discrepancy of the distance between the objective lens and the recording medium from a desirable distance such that the distance between the objective lens and the recording medium becomes the desirable distance.

As in claims 7 and 8, the prior art of record fails to teach or fairly suggest a method of detecting a deviation of a focal point position having the following features:

(a) the intensity distribution of the reflected light is an intensity distribution of a spot of the reflected light which is projected on a light receiving surface which is arranged confocal with respect to the recording medium; and

(b) based on an intensity at the center inside the spot and a distance between the center of the spot and a point at which an intensity of a diffraction ring is maximum, the discrepancy of the distance between the objective lens and the recording medium from the desirable distance is detected.

As in claims 20 and 21, the prior art of record fails to teach or fairly suggest a focal point deviation detecting means having the following features:

(a) the intensity distribution of the reflected light is an intensity distribution of a spot of the reflected light which is

projected on a light receiving surface is detected as the intensity distribution of the reflected light; and

(b) a judgment means judges an intensity at the center inside the spot and a distance between the center of the spot and a point at which an intensity of a diffraction ring of the spot to thereby detect the discrepancy of the distance between the objective lens and the recording medium from a desirable distance.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over the prior art of record.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hoshino et al. (5,740,138) is pertinent because Hoshino teaches a second laser with a longer wavelength as a rough focusing adjusting means.

5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C.
20231 Or faxed to:

(703) 872-9306 (for formal communications intended for
entry. Or:

(703) 746-6909, (for informal or draft communications,
please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park
II, 2021 Crystal Drive, Arlington. VA., Sixth Floor
(Receptionist).

Any inquiry of a general nature or relating to the status of
this application should be directed to the Group receptionist
whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Kim CHU
whose telephone number is (703) 305-3032 between 9:30 am to 6:00
pm, Monday to Friday.

K 11/22/04
Kim-Kwok CHU
Examiner AU2653
November 22, 2004

(703) 305-3032

William Korzuch
WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600